

AMENDMENTS TO THE CLAIMS

/John Mabry/ (08/21/2008)

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A process for preparing a) nitriles of the formula (II) and b) isonitriles of the formula (III)



said process comprising reacting

- a) carboxamides ($RCO-NH_2$), ammonium salts of carboxylic acids ($RCOO-NH_4^+$) or carboxylic acids in the presence of ammonia or ammonium salts ($RCOOH + NH_3$, $RCOOH + NH_4^+$) or
- b) formamides ($H-CO-NHR$) or mixtures of amines with formic acid, with cyclic phosphonic anhydrides with elimination of water at a temperature in the range from -30 to +120°C,
where R may have any substitution and is a linear or branched C_1-C_8 -alkyl radical, a C_3-C_{10} -cycloalkyl, alkenyl, alkynyl, phenyl or C_1-C_4 -alkyl-phenyl or an aryl or heteroaryl radical.

2. (Currently Amended) The process as claimed in claim 1, wherein the cyclic phosphonic anhydride is a 2,4,6-substituted 1,3,5,2,4,6-trioxatriphosphinane 2,4,6-trioxide which is independently substituted with open-chain or branched, saturated or unsaturated, straight-chain C_1 to C_{16} -alkyl radicals or cyclic C_3 to C_{16} -alkyl radicals, or aryl or heteroaryl phenyl.

3. (Previously Presented) The process as claimed in claim 2, wherein the cyclic phosphonic anhydride is independently substituted with a methyl, ethyl, n-propyl, isopropyl, n-butyl, 2-butyl, isobutyl, pentyl, or hexyl radical.

4. (Original) The process as claimed in claim 2, wherein the cyclic phosphonic anhydride is propanephosphonic anhydride.

5. (Previously Presented) The process as claimed in claim 1, wherein the cyclic phosphonic anhydride is either a melt or dissolved in a solvent.

6. (Previously Presented) The process as claimed in claim 5, wherein the cyclic phosphonic anhydride is in an aprotic solvent.

7. (Previously Presented) The process as claimed in claim 1, wherein said process further comprises

- (i) forming a reaction solution comprising carboxamides; ammonium salts of carboxylic acids; carboxylic acids in the presence of ammonia or ammonium salts; formamide; or mixtures of amines with formic acid;
- (ii) adding cyclic phosphonic anhydride to the reaction solution; and
- (iii) heating the reaction solution to reaction temperature,
wherein the reaction solution is heated to the reaction temperature after addition of the phosphonic anhydride.

8. (Previously Presented) The process as claimed in claim 1, wherein nitriles are prepared and an ammonium salt together with a carboxylic acid (R-COOH) is reacted with the phosphonic anhydride in the presence of a base.

9. (Previously Presented) The process as claimed in claim 8, wherein the base is triethylamine, tripropylamine, benzyltrimethylamine, N,N-dimethylaniline or pyridine.

10. (Currently Amended) The process as claimed in claim 2, wherein the cyclic phosphonic anhydride is independently substituted with an ethyl, propyl, and/or butyl radical.

11. (Previously Presented) The process as claimed in claim 6, wherein the cyclic phosphonic anhydride and aprotic solvent are in a ratio of from 1:1 to 1:2.

12. (Currently Amended) A process for preparing a) nitriles of the formula (II) and b) isonitriles of the formula (III)



said process comprising reacting

- a) carboxamides ($RCO-NH_2$), ammonium salts of carboxylic acids ($RCOO-NH_4^+$) or carboxylic acids in the presence of ammonia or ammonium salts ($RCOOH + NH_3$, $RCOOH + NH_4^+$) or
- b) formamides ($H-CO-NHR$) or mixtures of amines with formic acid, with cyclic phosphonic anhydrides with elimination of water at a temperature in the range from -30 to +120°C,
where R may have any substitution and is a linear or branched C_1-C_8 -alkyl radical, a C_3-C_{10} -cycloalkyl, alkenyl, alkynyl, a phenyl or derivative thereof p-methyl-phenyl.